

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method for determining a first and a second reference picture of a current block, comprising the steps of:

(A) finding in a first list a co-located picture ~~and~~
5 having a co-located block;

(B) determining in a second list ~~a given an inter-~~
reference picture of said co-located block, wherein a unique
identifier is associated with said inter-reference picture;

(C) mapping in a third list a reference index to a
10 lowest valued reference index associated with said unique
identifier, where said given reference picture is stored wherein
said unique identifier is associated with said inter-reference
picture from (i) when said unique identifier is used with said
inter-reference picture in said second list for said co-located
15 picture to (ii) when said unique identifier is used with said
inter-reference picture made available as a potential reference
picture in said third list for said current block; and

(D) using (i) said reference index to determine said
second reference picture and (ii) said co-located picture as said
20 first reference picture, wherein said first and said second
reference pictures are used for inter-prediction of said current
block.

2. (ORIGINAL) The method according to claim 1, wherein said block comprises an H.264 direct-mode macroblock or macroblock partition.

3. (CURRENTLY AMENDED) The method according to claim 1, wherein step (C) further comprises:

storing a respective unique identifier for each reference picture, ~~wherein said unique identifier is associated from (i) when~~
5 ~~said unique identifier was used as an inter-reference in the co-~~
~~located picture to (ii) when said unique identifier is made~~
~~available as a potential List0 inter-reference for the current~~
~~picture.~~

4. (CURRENTLY AMENDED) The method according to claim 1, further comprising the step of:

storing ~~a~~ said unique identifier of said ~~given~~ inter-
reference picture.

5. (CURRENTLY AMENDED) The method according to claim 1
~~4~~, wherein said inter-prediction operates on (i) a macroblock when
in a first configuration and (ii) a macroblock partition when in a
second configuration.

6. (CURRENTLY AMENDED) The method according to claim 1
4, wherein step (C) further comprises:

searching said third list for the lowest valued reference
index identified by said unique identifier and returning the value
5 of said lowest valued reference index.

7. (ORIGINAL) The method according to claim 1, wherein
said method further comprising the step of:

implementing an interpolative direct mode prediction and
a flexible choice for the picture referenced by a finite index
5 reference.

8. (ORIGINAL) The method according to claim 1, wherein
said method is implemented in a video encoder.

9. (ORIGINAL) The method according to claim 1, wherein
said method is implemented in a video decoder.

10. (CURRENTLY AMENDED) An apparatus for determining a
first and a second reference picture of a current block, comprising
the steps of:

means for finding in a first list a co-located picture
5 and having a co-located block;

means for determining in a second list ~~a given~~ and inter-reference picture of said co-located block, wherein a unique identifier is associated with said inter-reference picture;

5 means for mapping in a third list a reference index to a lowest valued reference index associated with said unique identifier, where said given reference picture is stored wherein said unique identifier is associated with said inter-reference picture from (i) when said unique identifier is used with said inter-reference picture in said second list for said co-located
10 picture to (ii) when said unique identifier is used with said inter-reference picture made available as a potential reference picture in said third list for said current block; and

means for using (i) said reference index to determine said second reference picture and (ii) said co-located picture as
15 said first reference picture, wherein said first and said second reference pictures are used for inter-prediction of said current block.

11. (ORIGINAL) The apparatus according to claim 10, wherein said block comprises an H.264 direct-mode macroblock or macroblock partition.

12. (CURRENTLY AMENDED) The apparatus according to claim 10, wherein said means for mapping comprises:

means for storing a respective unique identifier for each reference picture, ~~wherein said unique identifier is associated from (i) when said unique identifier was used as an inter-reference in the co-located picture to (ii) when said unique identifier is made available as a potential List0 inter-reference for the current picture.~~

13. (CURRENTLY AMENDED) The apparatus according to claim 10, further comprising:

means for storing a said unique identifier of said given inter-reference picture.

14. (CURRENTLY AMENDED) The apparatus according to claim ~~10~~ 13, wherein said inter-prediction operates on (i) a macroblock when in a first configuration and (ii) a macroblock partition when in a second configuration.

15. (CURRENTLY AMENDED) The apparatus according to claim ~~10~~ 13, wherein said means for mapping further comprises:

means for searching said third list for the lowest valued reference index identified by said unique identifier and returning the value of said lowest valued reference index.

16. (CURRENTLY AMENDED) The apparatus according to claim 10, wherein said apparatus further comprises ~~comprising~~:

means for implementing an interpolative direct mode prediction and a flexible choice for the picture referenced by a finite index reference.

17. (ORIGINAL) The apparatus according to claim 10, wherein said apparatus is implemented in a video encoder.

18. (PREVIOUSLY PRESENTED) The apparatus according to claim 10, wherein said apparatus is implemented in a video decoder.

19. (CURRENTLY AMENDED) An apparatus comprising:

a circuit configured to (i) find in a first list ~~of a current block~~ a co-located picture ~~and~~ having a co-located block, (ii) determine in a second list ~~a given~~ an inter-reference picture of said co-located block, wherein a unique identifier is associated with said inter-reference picture, (iii) map in a third list a reference index to a lowest valued reference index associated with said unique identifier, ~~where said given reference picture is stored~~ wherein said unique identifier is associated with said inter-reference picture from (i) when said unique identifier is used with said inter-reference picture in said second list for said co-located picture to (ii) when said unique identifier is used with

said inter-reference picture made available as a potential reference picture in said third list for a current block and (iv)

15 using (a) said reference index to determine a second reference picture and (b) said co-located picture as a first reference picture, wherein said first and said second reference pictures are used for inter-prediction of said current block.

20. (CURRENTLY AMENDED) The apparatus according to claim 19, further comprising a memory configured to store a respective unique identifier for each reference picture, ~~wherein said unique identifier is associated from (i) when said unique identifier was used as an inter-reference in the co-located picture to (ii) when said unique identifier is made available as a potential List0 inter-reference for the current picture.~~

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